

### REMARKS

This amendment is submitted in response to the non-final Office Action mailed August 18, 2006. Following entry of this amendment, claims 19-40 will be pending in this application. Claims 19 and 37 are independent. In the Office Action, the Examiner:

- objected to claim 9 for a minor typographical error;
- rejected pending claim 4 under 35 U.S.C. § 112, second paragraph, as indefinite for lack of antecedent basis for the term “the inside thread”;
- rejected pending claims 1-4, 10, 12, 15, and 16 under 35 U.S.C. § 103(a) as obvious in view of U.S. Patent No. 5,454,813 to Lawes (hereinafter “Lawes”);
- rejected pending claims 6 and 7 under 35 U.S.C. § 103(a) as obvious in view of Lawes in combination with United States Patent No. 6,648,889 to Bramlet et al. (hereinafter “Bramlet”);
- rejected pending claims 13 and 14 under 35 U.S.C. § 103(a) as obvious in view of Lawes in combination with U.S. Patent No. 6,187,007 to Frigg et al. (hereinafter “Frigg ’007 patent”);
- rejected pending claim 11 under 35 U.S.C. § 103(a) as obvious in view of Lawes in combination with U.S. Patent No. 5,908,422 to Bresina (hereinafter “Bresina”); and
- rejected pending claim 17 under 35 U.S.C. § 103(a) as obvious in view of Lawes in combination with U.S. Patent Publication No. 2004/0044345 to DeMoss et al. (hereinafter “DeMoss”).

Applicants have canceled claims 1-18 and added new claims 19-40 to conform with United States patent practice, further define the invention recited, and more clearly distinguish over the cited prior art. Applicants have also amended the specification to conform with United States patent practice and correct minor grammatical and typographical errors. All amendments are fully supported by the originally-filed specification and/or drawings of the present application. No new matter has been added. The claim amendments made herein do not represent acquiescence in the Examiner’s rejections, but rather are made only to expedite prosecution of the present application. Applicants expressly reserve the right to pursue the subject matter of any previously presented and/or canceled claims in one or more continuation applications. As discussed more fully below, Applicants respectfully

submit that each of the currently pending claims define features that are not disclosed, taught or suggested by the prior art of record and respectfully request allowance of same.

**Claim Objections**

The Examiner objected to claim 9 for informalities, *i.e.*, the Examiner stated that the term “blocking means” should probably have read “locking means.” Applicants have canceled claim 9 and added new claims 19-40, which do not include any recitation of “blocking means.” Accordingly, applicants respectfully request withdrawal of the objection to claim 9.

**Claim Rejections - 35 U.S.C. § 112**

Claim 4 was rejected as indefinite for lack of antecedent basis for the term “the inside thread.” Applicants have canceled claim 4 and added new claims 19-40, which do not include any similar antecedent basis problems. Accordingly, applicants respectfully request withdrawal of the rejection of claim 4.

**Claim Rejections - 35 U.S.C. § 103(a)**

Each of pending claims 1-18 was rejected as obvious in view of Lawes alone or Lawes in combination with one of Bramlet, the Frigg '007 patent, Bresina or DeMoss. Applicants respectfully traverse each of these claim rejections and, for the reasons discussed below, submit that none of the cited prior art references, either taken alone or in combination, discloses, teaches or suggests each of the limitations recited in new independent claims 19 and 37, or their dependent claims 20-36 and 38-40.

Lawes, the primary reference cited in each of the obviousness claim rejections, discloses a femoral fracture fixation appliance including an intramedullary rod, a femoral neck screw, and a locking element, *i.e.*, sleeve 12. (Lawes at col. 3:35-62.) As discussed in the specification of Lawes and clearly shown in Lawes' FIGS. 2-5, the inner bore of the locking sleeve 12 is shaped with first abutment surfaces that prevent rotation of the femoral neck screw relative to the sleeve. (Lawes at col. 3:56-62; FIGS. 2-5.) The outer surface of sleeve is also provided with second abutment surfaces to engage co-operating surfaces provided on the wall of the angulated opening in the intramedullary rod to prevent relative rotation between the sleeve and the rod — thereby preventing relative rotation between the

femoral neck screw and said rod. (Lawes at col. 2:60-67.) Therefore, once the sleeve in Lawes is placed over the femoral neck screw, relative rotation between the neck screw and sleeve is not possible.

New independent claim 19 recites a device for the treatment of femoral fractures comprising, *inter alia*, a sliding sleeve having a central bore, an interior surface profile, and an exterior surface profile, the central bore and interior surface profile configured to receive the shaft of the bone fixing element while permitting free rotation of the bone fixing element relative to the sleeve, and the exterior surface profile having at least a portion with a non-circular cross-section adapted to mate with the non-circular cross-section of the transverse opening, thereby preventing rotation of the sleeve with respect to the intramedullary pin, and a locking mechanism configured and adapted to selectively lock rotation of the bone fixing element relative to the sleeve when in a first position and permit free rotation of the bone fixing element relative to the sleeve when in a second position. Claim 37 includes similar limitations.

As discussed above, Lawes does not disclose, teach or suggest “a sliding sleeve having a central bore, an interior surface profile, and an exterior surface profile, the central bore and interior surface profile configured to receive the shaft of the bone fixing element while permitting free rotation of the bone fixing element relative to the sleeve” or “a locking mechanism configured and adapted to selectively lock rotation of the bone fixing element relative to the sleeve when in a first position and permit free rotation of the bone fixing element relative to the sleeve when in a second position.” Relative rotation between the Lawes sleeve and the femoral neck screw is simply not possible.<sup>1</sup> The other cited prior art references similarly fail to disclose, teach or suggest the device recited in new independent claims 19 and 37.

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<sup>1</sup> In this regard, applicants note that the Office Action states that “[i]t would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the inner surface of the sleeve of Lawes with a circular cross-section.” (See Aug. 18, 2006 Office Action at 4.) However, applicants respectfully submit that modifying the inner surface of the sleeve of Lawes to have a circular cross-section would completely change the basic principle of operation of the Lawes device and render the Lawes device unsatisfactory for its intended purpose. See MPEP § 2143.01. If the Lawes sleeve was modified as proposed in the Office Action, it would no longer prevent rotation of the femoral neck screw relative to the rod — Lawes’ primary objective. (Lawes at col. 2:28-30.)

**Allowable Subject Matter**

Applicants wish to thank the Examiner for the indication of allowable subject in claims 8 and 9. The subject matter of claims 8 and 9 has been incorporated into new claims 28 and 29, respectively.

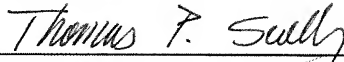
For the reasons discussed above, applicants submit that new independent claims 19 and 37 are allowable over the prior art of record, and applicants respectfully request allowance of those claims and their dependent claims 20-36 and 38-40.

The Examiner is invited to call the undersigned attorney at (212) 326-3939 if a telephone call could help resolve any remaining issues.

A separate Amendment Fee Sheet for additional claim fees is submitted herewith. Should any additional fees be required, please charge such fees to Jones Day deposit account no. 50-3013.

Respectfully submitted,

Date: November 15, 2006

  
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